

What is claimed is:

1 1. A modular laboratory cabinet assembly, comprising:

2 a pair of unitary housing end units arranged in an inverted spaced apart
3 relation to each other, each said end unit having a base bounded by front, rear, first
4 and second sides terminating at a common peripheral edge separating interior and
5 exterior surfaces of said end unit, said peripheral edge having a recessed segment
6 extending along said front side, each said base having a plurality of elongated
7 supporting members with guiding apertures passing therethrough;

8 at least one unitary U-shaped housing module interposed between said end
9 units and having a rear side, a first side, a second side and a pair of front side
10 portions depending inwardly from said first and second sides of the housing
11 module, each front side portion terminating at a substantially vertical edge, said
12 sides of the housing module terminating at peripheral edges thereof, a lower
13 inwardly depending ledge, a plurality of columns each having a longitudinal
14 guiding channel passing therethrough; and

15 a door pivotably attached to the front sides of said housing end units and a
16 plurality of connecting members;

17 wherein, the longitudinal supporting members of the end units are
18 substantially aligned with the respective columns of the module, so that the
19 guiding apertures and the guiding channels form a continuous air-tight passages
20 extending through the entire assembly to receive the connecting members.

1 2. A modular laboratory cabinet assembly as recited in claim 1, further
2 comprising frictional means integrally formed on the exterior surface of the base
3 of each end unit for minimizing slipping between a vertically stacked said cabinet
4 assemblies.

1 3. A modular laboratory cabinet assembly as recited in claim 2, wherein
2 said frictional means further comprises first and second pairs of outwardly
3 projecting and diagonally opposed engaging segments, in each said pair the
4 engaging segments are positioned at an angle to each other, said first set of
5 engaging segments being disposed peripherally inward with respect to said second
6 set of engaging segments, in a stacked cabinet arrangement the first pair of
7 engaging segments disposed on an upper housing end unit of a lower one of said
8 stacked cabinet assemblies frictionally engages the second pair of engaging
9 segments disposed on an inverted lower housing end unit of an upper one of said
10 stacked cabinet assemblies, and vice versa.

1 4. A modular laboratory cabinet assembly as recited in claim 1, further
2 comprising a pair of ribs extending longitudinally from the outer surfaces of the
3 first and second sides of each housing end unit.

1 5. A modular laboratory cabinet assembly as recited in claim 4, wherein
2 said ribs have finger-receiving recesses oriented in opposite directions formed
3 therein, one of said recess oriented in one direction is positioned between two
4 adjacent recesses oriented in the opposite direction.

1 6. A modular laboratory cabinet assembly as recited in claim 4, wherein
2 in a horizontal orientation of the assembly in which the bases of the end units are
3 positioned substantially vertically said ribs function as support feet for supporting
4 the cabinet assembly on a support surface.

1 7. A modular laboratory cabinet assembly as recited in claim 1, wherein
2 the lower inwardly depending ledge of said U-shaped housing module further
3 comprises an inwardly depending step for supporting a shelf when said storage
4 assembly is supported on a surface in a vertical orientation.

1 8. A modular laboratory cabinet assembly as recited in claim 7, wherein
2 the base of each of said housing end unit further comprises integrally formed
3 planar shelf supporting portions extending substantially perpendicularly from the
4 interior surface thereof for supporting a shelf when said assembly is supported on
5 a surface in a horizontal orientation.

1 9. A modular laboratory cabinet assembly as recited in claim 1, further
2 comprising protrusions having door hinge pin receiving apertures formed therein
3 and positioned at opposite ends of the exterior surface of the front side of each of
4 said end units.

1 10. A modular laboratory cabinet assembly as recited in claim 9, wherein
2 said door further comprises:

3 a pair of integrally formed upper and lower hinge pins sized, shaped and
4 oriented for being received through said hinge pin receiving apertures;

5 an interior recessed window portion defined by front, top, bottom and
6 hinged sides; and

7 a flange portion disposed along an unhinged side of said door, the flange
8 portion having a pair of apertures extending therethrough and positioned on
9 opposite sides of an integrally formed door handle portion thereof, the apertures

10 sized and shaped for snugly receiving said end unit integral protrusions
11 therethrough.

1 11. A modular laboratory cabinet assembly as recited in claim 10, further
2 comprising gasket members interposed between the non-recessed segments of the
3 peripheral edges of said end units and the corresponding upper edge and lower
4 ledge of said U-shaped housing module; said door having a gasket disposed on an
5 interior surface thereof; and further comprising means for maintaining said door in
6 a closed position,

1 12. A modular laboratory cabinet assembly as recited in claim 1, wherein
2 said supporting members are positioned at each corner of the respective end unit
3 extending outwardly from the inner surface thereof, each said column is positioned
4 at a respective corner of the U-shaped housing module and extend from the lower
5 inwardly depending ledge along an inner surfaces of the first and second sides of
6 the module.

1 13. A modular laboratory cabinet assembly as recited in claim 10, wherein
2 the assembly is adapted for having a humidity controlled interior, the door further

3 comprising at least one integrally formed contiguous wall protruding from the
4 interior surface of said window front side.

1 14. A modular laboratory cabinet assembly as recited in claim 12, wherein
2 the connecting elements extend through said respective continuous air-tight
3 passages, said connecting members having fastening means provided at the
4 opposite ends thereof and engaging the top sides of said end units in a manner
5 urging said end units toward one another.

1 15. A modular laboratory cabinet assembly as recited in claim 14, wherein
2 flexible members are provided between abutting ends of the supporting members
3 and the columns to further enhance air-tightness of the assembly.

1 16. A modular laboratory cabinet assembly as recited in claim 1, wherein
2 said at least one unitary U-shaped housing module comprises a plurality of
3 modules provided in a stacked arrangement, the assembly further comprising:

4 peripheral housing gasket members interposed between the peripheral
5 edges of the adjacent ones of said stacked modules.

1 **17.** A modular laboratory cabinet assembly as recited in claim 16, wherein
2 upon said cabinet assembly being provided on a support surface in a vertical
3 orientation, the assembly further comprises a plurality of shelves supported on said
4 step portions.

1 **18.** A modular laboratory cabinet assembly as recited in claim 16, wherein
2 upon said cabinet assembly being provided in a horizontal orientation on a support
3 surface, the assembly further comprising a plurality of shelves supported on said
4 end unit planar shelf supporting portions.

1 **19.** A modular laboratory cabinet assembly as recited in claim 1, further
2 comprising of an arrangement for maintaining said door in a closed position.